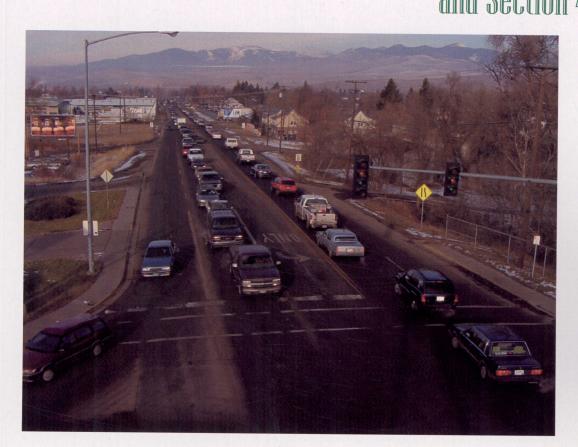




Draft Environmental Impact Statement and Section 4(1) Evaluation









Russell Street / South 3rd Street - Missoula stpu-m 8105(8) upn 4128

August 2008

RUSSELL STREET / SOUTH 3RD STREET STPU-M 8105(8) Control No. 4128

Missoula County, Montana

DRAFT ENVIRONMENTAL IMPACT STATEMENT AND DRAFT SECTION 4(F) EVALUATION

Submitted Pursuant to 42 U.S.C. 4332(c), 49U.S.C. 303, 23 CFR 774, Sections 2-3-104 & 75-1-201, M.C.A., 23 CFR 771.123, and Executive Orders 11990, 11988, and 12898

By the

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION

MONTANA DEPARTMENT OF TRANSPORTATION

and

CITY OF MISSOULA

and

Cooperating Agencies

U.S. Army Corps of Engineers U.S. Fish and Wildlife Service

Montana Fish, Wildlife & Parks

Date Reviewed & Approved for Distribution

| This is a series of the content of t

The following persons may be contacted for additional information concerning this document:

Craig Genzlinger Federal Highway Administration 585 Shepard Way Helena, Montana 59601 (406) 449-5302

Tom Martin, P.E. Montana Department of Transportation Environmental Services 2701 Prospect Avenue Helena, Montana 50620-1001 (406) 444-7228 Gregg Wood City of Missoula Public Works 435 Ryman Street Missoula, Montana 59802 (406) 552-6093

Abstract: The proposed action is the reconstruction of Russell Street from Mount Avenue/South 14th Street to West Broadway Street, and South 3rd Street from Reserve Street to Russell Street to address current and projected safety and operational needs. The Preliminary Preferred Alternative would have four travel lanes and a center turn lane/median on Russell Street, and two travel lanes and a center turn lane/median on South 3rd Street. Major intersections on Russell Street would be controlled with signals while roundabouts would be constructed on South 3rd Street.

A Final Environmental Impact Statement will be issued to address concerns or preferences identified by the public and regulatory agencies during the comment period.

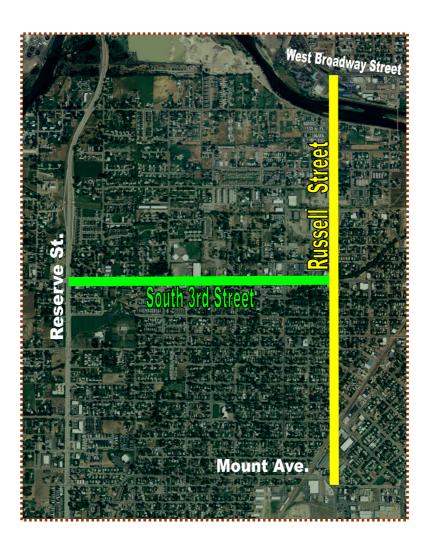
Comments on this Draft Environmental Impact Statement are due by October 20, 7008 and should be sent to Gregg Wood at the address listed above, or submitted online at the website listed on the back of this page.



EXECUTIVE SUMMARY

The proposed project includes the reconstruction of approximately 1.5 miles of Russell Street from the intersection at Mount Avenue/South 14th Street north to West Broadway Street, and reconstruction of approximately one mile of South 3rd Street from Reserve Street east to Russell Street.

Russell Street currently varies in width from two to four lanes including turn lanes at some intersections, and includes a two-lane bridge over the Clark Fork River. And South 3rd Street currently varies in width but generally includes one travel lane in each direction and turn lanes at some intersections.



Proposed Action

The City of Missoula, in cooperation with the Montana Department of Transportation and the Federal Highway Administration, initiated a study to evaluate alternatives to address the current and projected safety and mobility concerns on Russell Street and South 3rd Street. The proposed project includes vehicular capacity improvements, accommodation of alternative transportation modes, transit pullouts, sidewalks, grade-separated trail crossings, curb & gutter, boulevards, bicycle lanes, and stormwater drainage. Signalization of key intersections, as well as the potential for construction of roundabout traffic control is also under consideration with this proposed project.

Purpose of the Proposed Action

Given the physical location and functional designations of the Russell Street and South 3rd Street routes, the high traffic volumes, crash history, and multi-modal use of the corridors, the purpose of this proposed project is to provide substantive safety and mobility improvements for all modes of travel in the Russell Street and South 3rd Street corridors.

Need for the Proposed Action

In these two corridors, a lack of future system capacity and lack of sidewalk continuity are two substantive deficiencies affecting mobility for both motorized and non-motorized users and that point to a need for improvements. If these two issues can be addressed, additional benefits can also be gained in the following areas: vehicular, pedestrian, and bicycle safety; trail connectivity; improved transit service; and upgrades to an aging bridge structure.

Development of Alternatives

Initial project alternatives for Russell Street and South 3rd Street were developed based on forecast travel demand and congestion levels, bike/pedestrian corridor travel and crossing safety, issues raised in the public involvement process, and efforts to avoid known physical constraints within the corridors. Throughout the public involvement process, participants expressed a desire that improvements in the Russell Street and South 3rd Street corridors include bicycle facilities, sidewalks, bus turnouts, curbs and gutters for stormwater management, river trail system access to the roadway, illumination, landscaping, and pedestrian crossing facilities. The inclusion or exclusion of these elements will determine the width and functionality of the facilities, and define the overall feel of the corridors.



Description of Alternatives

The following summary tables outline the major features of the No-Build and the five Build alternatives for Russell Street, and the four Build alternatives for South 3rd Street that were analyzed as part of this environmental review.

Russell Street Alternatives:

	Alt. 1 (No-Build)	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 5 (refined)
Number of Vehicular Lanes:						
Mount to South 8 th	2	2	2+	4+	4+	4+
South 8 th to South 5 th	2	2+	2+	4+	4+	4+
South 5 th to South 3 rd	4	2+	4	4+	4+	4+
South 3 rd to the bridge	2+	2+	2+	4+	4+	4+
The bridge to W. Broadway	2	4	4	4+	4+	4+
Intersection Control:						
Signals	J			J		
Roundabouts		J	J		J	√ *
Design Elements:						
Sidewalks		J	J	J	J	J
Bike lanes		J	J	J	J	J
Boulevards		J	J	J	J	J
Curb/Gutter		J	1	J	J	J
Lighting		J	J	J	J	J
Bus Pullouts		J	J	J	J	J

South 3rd Street Alternatives:

	Alt. A (No-Build)	Alt. B	Alt. C	Alt. D	Alt. E
Number of Vehicular Lanes:					
Reserve St. to Russell St.	2	2	2+	3+	2+
Intersection Control:					
Signals	J			J	J
Roundabouts		J	J		
Design Elements:					
Sidewalks		J	J	J	J
Bike lanes		J	J	J	J
Boulevards		J	J	J	J
Curb/Gutter		J	J	J	J
Lighting		J	J	J	J
Bus Pullouts		j	J	Ĵ	J

Notes: 2+ denotes a two-lane section with a center turn lane/raised median

⁴⁺ denotes a four-lane section with a center turn lane/raised median

 J^* denotes a modified roundabout design to minimize impacts to protected resources

Summary Evaluation

The primary difference in impacts and costs between the alternatives is outlined below:

Russell Street:

Russen Su eet.				
Alt 2	Alt. 3	Alt. 4	Alt. 5	Alt. 5 (refined)
 9 Homes 13 Commercial Buildings 4 4(f) Properties 4.07 acres new right-of-way \$41.3 million 	 9 Homes 13 Commercial Buildings 4 4(f) Properties 4.60 acres new right-of-way \$41.7 million 	 11 Homes 10 Commercial Buildings 3 4(f) Properties 4.32 acres new right-of-way \$39.6 million 	 18 Homes 13 Commercial Buildings 6 4(f) Properties 5.38 acres new right-of-way \$44.5 million 	 12 Homes 10 Commercial Buildings 4 4(f) Properties 4.11 acres new right-of-way \$39.2 million

South 3rd Street:

Alt. B	Alt. C	Alt. D	Alt. E
• 3 Homes	• 3 Home	• 2 Homes	• 2 Homes
 2 Commercial 	 2 Commercial 	 1 Commercial 	 1 Commercial
Buildings	Buildings	Building	Building
• 2.38 acres of new right-of-way	• 2.77 acres of new right-of-way	• 3.62 acres of new right-of-way	• 2.63 acres of new right-of-way
• \$12.4 million	• \$12.8 million	• \$13.1 million	• \$11.2 million

Note: Planning level cost estimates are in 2007 dollars. If the project were constructed in phases, it would be possible to construct the segment from West Broadway Street to approximately South 3rd Street at a cost of approximately \$26.5 million in the year 2012. The project proponents would continue to seek funding for subsequent phases and accumulate those funds over the next several years to ensure completion of the project by the year 2030. Utilities, design, and indirect costs would be additional costs not included above. Right-of-way costs are also conceptual and dependent upon final right-of-way negotiations.





Based on the operational analysis and the impacts and costs summarized above, the following decisions were made regarding the elimination and further evaluation of alternatives:

Russell Street Alternatives	Status	Rationale
1 – No Build	Retained	Must retain for comparison.
2-2+ lanes w/ Roundabouts	Eliminated	Does not meet Purpose and Need.
3 - 2 + /4 lanes w/ Roundabouts	Eliminated	Does not meet Purpose and Need.
4 – 4+ lanes w/ Signals	Selected as Preliminary Preferred Alternative	Meets Purpose and Need, and has least impact and cost.
5 – 4+ lanes w/ Roundabouts	Retained for Detailed Analysis	Meets Purpose and Need, but has Adverse Effect on protected historic properties.
5* - 4+ lanes w/ Modified Roundabouts	Retained for Detailed Analysis	Meets Purpose and Need, but has Adverse Effect on protected historic property.
South 3 rd Street Alternatives		
A – No Build	Retained	Must retain for comparison.
B – 2 lanes w/ Roundabouts	Retained for Detailed Analysis	Meets Purpose and Need, but provides operational improvements for least amount of time.
C – 2+ lanes w/ Roundabouts	Selected as Preliminary Preferred Alternative	Meets Purpose and Need, and provides best long-term operations.
D – 3+ lanes w/ Signals	Retained for Detailed Analysis	Meets Purpose and Need, but has larger impact with minimal gain in operational efficiency.
E – 2+ lanes w/ Signals	Retained for Detailed Analysis	Meets Purpose and Need, and operational improvements but shorter timeframe than Alternative C

Note: * Alternative 5 was refined to include alignment shifts and modifications to the proposed roundabouts in an attempt to avoid and minimize impacts to protected resources.

Identification of the Preliminary Preferred Alternatives

Based on the fact that Alternative 4 satisfies the purpose and need to improve safety and mobility within the corridor, has fewer 4(f) impacts, and less over all impact as compared to Alternative 5 and the refined Alternative 5, the four-lane roadway improvement with signalized intersections proposed under Alternative 4 for Russell Street is identified as the Preliminary Preferred Alternative.

Alternative 5 (refined) was vigorously explored as the locally preferred alternative due in large part to community preference for roundabout intersection control and the expressed desire for a roadway improvement project like Stevens Avenue. During detailed analysis, it became apparent that Alternative 5 (even through refinement) would impose an impact on protected historic properties within the corridor that could be avoided with other alternatives. Due to unavoidable impacts to the historic properties at South 5th Street, Alternative 5 has been advanced for detailed consideration but ultimately not identified as the preferred alternative due to impacts to historic resources. However, the City of Missoula remains committed to providing the necessary roadway safety and capacity improvements while providing a facility that is aesthetically pleasing and enhances the existing characteristics of the surrounding area.

Alternative C on South 3rd Street satisfies the purpose and need as well as the general goals and objectives established for the project. This alternative also appears to be most responsive to neighborhood preference, provides a greater opportunity for aesthetic enhancements, and could provide some safety advantage by reducing conflict points and crash severity at intersections as compared to signalized intersections. For these reasons, Alternative C has been identified as the Preliminary Preferred Alternative on South 3rd Street.

The final selection of Preferred Alternative will not be made until comments on this Draft Environmental Impact Statement, and comments from the Public Hearing have been fully considered.

Specific Design Elements of the Preliminary Preferred Alternatives

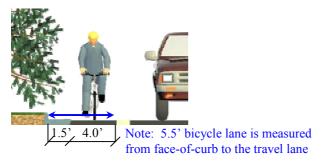
The nine design features recommended by the Advisory Committee would be fully incorporated into the Preliminary Preferred Alternative. The common features are:

• The existing **Russell Street Bridge** would be removed and replaced in the same general location with four lanes over the Clark Fork River to provide adequate capacity for projected traffic volumes and necessary hydraulic capacity.



• **Bicycle lanes** would be included to improve multi-modal transportation in the corridors. Bicycle lanes measuring approximately 5.5 feet wide measured from the face of the curb would be constructed on both sides of Russell Street and South 3rd Street. The proposed bicycle lanes would be delineated from motorized traffic by a solid white painted stripe and would be clearly marked as bicycle lanes.

Typical Bike Lane Cross Section



- **Sidewalks** measuring approximately 5.0 feet wide would be constructed along both sides of Russell Street and South 3rd Street.
- **Grade separated pedestrian/bicycle crossings** would be provided for the Milwaukee Corridor Trail, Bitterroot Branch, Shady Grove, and River Front Trail systems as they cross Russell Street.
- **Curb and gutter** as well as drywells/sumps would be included to improve stormwater management.
- Street lighting would be included to improve aesthetics and safety.
- Landscaped boulevards would be constructed on both sides of Russell Street and South 3rd Street between the curb and sidewalk, as well as medians in both corridors and the center island of roundabouts on South 3rd Street, to improve aesthetics.
- **Bus pullouts** would be incorporated into the final design along Russell Street north of South 3rd Street, and along South 3rd Street from Russell Street to Reserve Street. The transit system currently does not serve Russell Street south of South 5th Street, so no pullouts are planned for that portion of the corridor.
- On-street parking within the City right-of-way is currently prohibited along Russell Street and South 3rd Streets. **Parking restrictions would be maintained** in these areas.

Russell Street – Preliminary Preferred Alternative:

As illustrated in Figure 1, the Preliminary Preferred Alternative on Russell Street (Alternative 4) consists of two southbound and two northbound travel lanes, with raised medians and center turn lanes, and the use of signal control at key intersections.

As with all other Build alternatives, the Preliminary Preferred Alternative on Russell Street includes the following alignment and access modifications:

- Longstaff Street would be restricted to a right-in and right-out only connection with Russell Street.
- Lawrence Street would be realigned to a right-angle intersection with Russell Street with left turn storage on Russell Street.
- Access to Russell Street from Harlem Street and Kern Street on the east side of Russell Street would be restricted to a right-in and right-out only connection.
- Addison Street would be realigned to a right-angle intersection with Russell Street opposite from South 8th Street. Addison Street and South 8th Street would be restricted to right-in and right-out only connections with Russell Street.
- Knowles Street would be shifted slightly to the north to match with South 11th Street on the west.
- River Road would remain in its current configuration and would be restricted to a
 right-in and right-out connection with Russell Street. In addition, right-of-way
 would be purchased for the construction of a new link between River Road and
 Idaho Street that would become part of the River Road connection to Russell
 Street via Wyoming Street. The connection would include a newly constructed
 section of road running north-south adjacent to the western boundary of Mobile
 City Trailer between existing River Road and Idaho Street. It would also include
 reconstructed sections of Idaho Street between the new River Road and Catlin
 Street; Catlin Street between Idaho Street and Wyoming Street; and Wyoming
 Street between Catlin Street and Russell Street.



South 3rd Street – Preliminary Preferred Alternative:

As illustrated in Figure 2, the Preliminary Preferred Alternative on South 3rd Street (Alternative C) includes two travel lanes (one in each direction), roundabouts at select intersections, and the use of raised landscaped medians through a majority of the corridor to control through traffic and increase the functionality of the intersections and roundabouts.

The Preliminary Preferred Alternative also includes three trail connections depicted in Figure 3 and described as follows:

Bitterroot Branch Trail Connection

The Bitterroot Branch Trail Crossing would be constructed as a tunnel under Russell Street. The tunnel crossing would be constructed in approximately the same location as the existing trail crossing. The existing trail alignment would be modified to connect to the tunnel structure crossing.

Milwaukee Corridor Trail Connection

The Milwaukee Corridor Trail Crossing would be constructed as a tunnel under Russell Street. The tunnel crossing would be constructed in approximately the same location as where the existing trail terminates on the east side of Russell Street. The existing trail alignment would be modified to connect to the tunnel structure crossing.

Shady Grove (River Trail System) Trail Connection

Reconstruction of the Russell Street Bridge would include extension of the Shady Grove Trail westward under the north end of the bridge and construction of connections to the sidewalks on both sides of Russell Street. An underpass would also be provided under the south end of the bridge to accommodate future extension of the River Trail System to be completed by others.

Figure 1 Russell Street Preliminary Preferred Alternative -**West Broadway Street General Elements** Total Width = 94 feet Clark Fork River River Road Idaho Street **Montana Street Wyoming Street** Dakota Street Total Width = 94 feet 12.0 River Street South 1st Street South 2nd Street South 3rd Street South 4thStreet South 5th Street South 6th Street South 7th Street South 8th Street South 9th Street South 10th Street Note: 5.5' bicycle lane is measured from face-of-curb to the travel lane South 11th/Knowles Key: Street South 12th Street Four lanes with median/turn lane Raised median South 13th Street WWW Turn lane Traffic signal Mount Avenue / South 14th Street



Figure 2 South 3rd Street Preliminary Preferred Alternative – General Elements

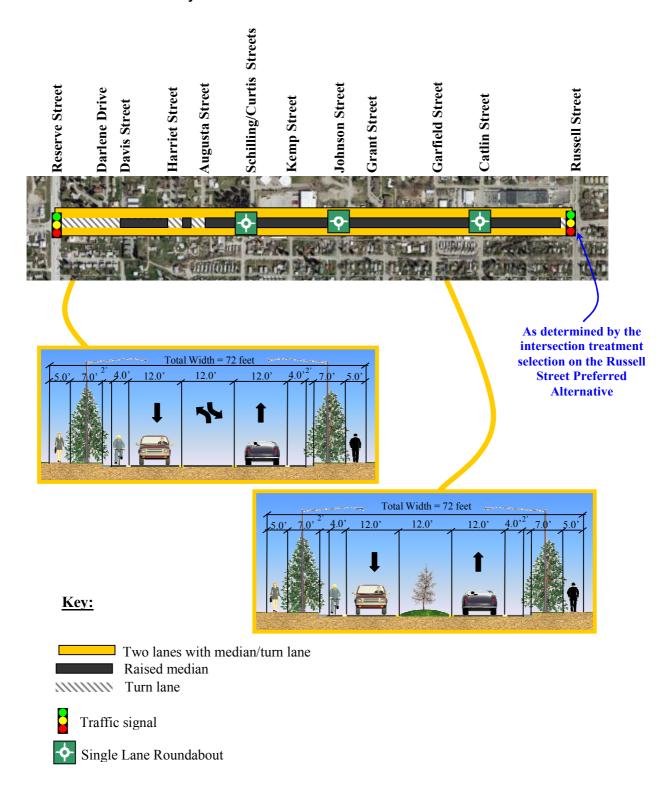


Figure 3
Proposed Grade-Separated Trail Crossings on Russell Street

Shady Grove Trail – proposed under-crossing

Riverfront Trail – proposed under-crossing for future trail extension by others

Milwaukee Trail – proposed under-crossing

Milwaukee Trail – proposed trail extension (not part of this project)

Bitterroot Branch Trail – proposed under-crossing



West Broadway Street

Clark Fork River

River Road

Idaho Street

Montana Street

Wyoming Street

Dakota Street

River Street South 1st Street

South 2nd Street

South 3rd Street

South 4thStreet

South 5th Street

South 6th Street

South 7th Street

South 8th Street

South 9th Street

South 10th Street

South 11th/Knowles

Street

South 12th Street

South 13th Street

Mount Avenue / South 14th Street



Impact and Mitigation Commitment Summary

No Build Alternatives

While the physical impacts would be limited under the No Build Alternative, this condition would result in worsening congestion and increasing difficulty of residential and business access for all modes of travel, as well as a hindrance on the operation of emergency response vehicles, including fire, police, and medical aid.

Build Alternatives

The following tables provide a summary of the expected impacts and proposed mitigation measures for the Preliminary Preferred Alternatives.

Russell Street Preliminary Preferred Alternative

Resource	Impacts	Mitigation Commitments
Land Use		
	No impacts on land use are expected.	No mitigation required.
Farmlands		
	No farmlands are located within project corridor.	No mitigation required.
Social Impacts		
Access	Substantial improvement to vehicular access because of the additional travel lanes.	
Property Impacts	Additional Right-of-Way would be required in order to accommodate the widening of Russell Street. 11 homes would need to be acquired including two Section 4(f) properties	Fair market value will be paid for properties to be acquired. Displaced residents will be relocated in compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970.
Environmental Justice	No impacts.	No mitigation required.
Economic Impacts		
Business Advancement	Substantial improvement to business advancement opportunities because of the implementation of traffic controls and subsequent access improvements.	No mitigation required.
Property Impacts	Additional Right-of-Way would be required in order to accommodate the widening of Russell Street. Nine commercial buildings would need to be acquired.	Fair market value will be paid for properties to be acquired. Displaced residents will be relocated in compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970.
Parks and Recreation		
	The Build alternatives would impact passive green space (Kern Park and Hart Park) owned by the City of Missoula. Recreation opportunities within the project area would be mostly beneficial, though short-term impacts under the Build alternatives would include: -Access restrictions to parks, trails, and the Clark Fork River during construction -Traffic congestion in areas of active construction -Dust, exhaust, and airborne debris in	Mitigation of the loss of green space will include additional landscaping and green space along Russell Street between Mount Avenue/South 14 th Street and South 3 rd Street. Trail impacts would be mitigated by providing three new grade separated crossings in the corridor.
	areas of active construction	
Pedestrian and Bicycle	Five and one-half foot wide bike lanes and five foot wide sidewalks are part of the design amenities in the Preliminary Preferred Alternative. Three grade separated trail crossings are also included.	Bicycle and pedestrian access will be improved within the project corridor, therefore, no mitigation is necessary for the proposed project.



Air Quality		
	No impacts.	No mitigation is required.
Noise Water Quality	to 22 receptors within the Russell Street corridor.	No feasible or reasonable noise mitigation was identified for existing receptors. To minimize traffic noise impacts at planned or proposed developments within the project area, noise-compatible land uses and /or noise mitigation measures will need to be incorporated into future development.
Surface/Stormwater	lead to more runoff which could possibly be contaminated by pollutants associated with the operation of a motor vehicle.	Direct impacts and indirect effects to water resources and water quality of the area will be minimized or avoided using Best Management Practices. Management of surface runoff may include a dry well system which may be subject to additional requirements. A determination that the project is not a threat to contaminate the aquifer will be requested from the
Groundwater	Surface runoff could percolate through the alluvial materials and into the Missoula Valley Aquifer.	Environmental Protection Agency, if appropriate, and will be provided in the Final Environmental Impact Statement for this proposed project.
Wetlands		
		No mitigation required.
Water Body and Wildlife H	In association with the Russell Street Bridge replacement, some temporary impacts would be anticipated during construction activities. Long-term impacts would include the permanent loss of some of the riparian vegetation used as habitat by small animals as well as soil exposure to long-term colonization by	Mitigation in the Russell Street Corridor includes raptor-proofing or power lines, preservation and restoration of riparian vegetation, erosion and sediment control, revegetation of areas disturbed by construction, and tree planting. The proposed replacement of the Russell Street Bridge will increase the hydraulic opening associated with the structure. Additionally, the Shady Grove Trail underpass of the bridge will be designed above the 2-year flood elevation. The final design process will include hydraulic and floodplain analysis in order to ensure compliance with Federal Emergency Management Agency regulations.
Floodplains	particularly the east side of Russell Street near the	The proposed Russell Street Bridge will increase the hydraulic opening associated with the structure. Additionally, the Shady Grove Trail underpass of the bridge will be designed above the 2-year flood elevation. The final design process will include hydraulic and floodplain analysis in order to ensure compliance with Federal Emergency Management Agency regulations.

Russell Street / South 3rd Street - Missoula **Executive Summary - 15**

Threatened or Endangered S	Species	
	trout and designated critical habitat are likely to be	Best Management Practices would be applied to reduce the amount of sediment entering the Clark Fork River. Formal consultation with the United States Fish and Wildlife Service will also occur before the approval of the Final Environmental Impact Statement.
Historic and Cultural Resou		
	has an Adverse Effect on two historic properties.	A Historic American Building Survey would be conducted, an oral history of the Russell Street Neighborhood would be recorded, and large format photographs of the Russell Street Corridor would be taken before, during, and after construction.
Hazardous Materials		
	hazardous materials concerns including asbestos, lead paint, and petroleum hydrocarbon contamination to soil and groundwater. The Russell Street Bridge could also	During the design and right-of-way phases of the proposed project, possible contamination sites would be investigated for the presence of hazardous materials. All buildings to be acquired within the project corridor would also be inspected for asbestos and lead contamination. A lead paint abatement plan for the Russell Street Bridge would need to be developed.
Visual Resources	filme were painted with lead-based paint.	
Visual Resources	Many of the design features in the Preliminary Preferred Alternative would improve the aesthetic quality of the corridor. Even though the road surface is wider under the Preliminary Preferred Alternative, placement of landscaping features within raised medians and landscaped boulevards would soften views from the road as well as providing a buffer zone between traffic and pedestrians. The removal of existing vegetation in the corridor may be necessary including some large diameter trees.	Due to the overall positive impacts on visual resources, no mitigation is required.



South 3rd Street Preliminary Preferred Alternative

Resource	Impacts	Mitigation Commitments
Land Use		
	No impacts.	No mitigation required.
Farmlands		
	No farmlands are located within project corridor.	No mitigation required.
Social Impacts		
Access	Substantial improvement to vehicular access because of the improvements to traffic control along South 3rd Street.	No mitigation required.
Property Impacts	Additional Right-of-Way would be required in order to accommodate the widening of South 3rd Street. One home would need to be acquired.	Fair market value will be paid for properties to be acquired. Displaced residents will be relocated in compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970.
Environmental Justice	No impacts.	No mitigation required.
Economic Impacts		
Business Advancement	Substantial improvement to business advancement opportunities because of the implementation of traffic controls and subsequent access improvements.	No mitigation required.
Property Impacts	Additional Right-of-Way would be required in order to accommodate the widening of South 3 rd Street. Four commercial buildings would need to be acquired.	Fair market value will be paid for properties to be acquired. Displaced residents will be relocated in compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970.
Parks and Recreation		
	No impacts.	No mitigation required.
Pedestrian and Bicycle		
	Five and one-half foot wide bike lanes and five foot wide sidewalks are part of the design amenities in the Preliminary Preferred Alternative.	Bicycle and pedestrian access will be improved within the project corridor; therefore, no mitigation is necessary for the proposed project.
Air Quality Noise	Regional analysis shows that the Preliminary Preferred Alternative would not have a detrimental effect on regional air quality.	No mitigation required.
Noise	Under the No-Build Alternative there would be impacts to 20 receptors within the South 3 rd Street corridor. Under the Preliminary Preferred Alternative four receptors would be acquired. There	There is an opportunity for a sound barrier between Garfield and Catlin Streets. This barrier would impact access to the first row of mobile homes along the south-side of South 3rd Street. A final decision of the installation of the abatement measure will be made during the final design and the public involvement process

Russell Street / South 3rd Street - Missoula **Executive Summary - 17**

Water Quality	would be two new impacts to noise receptors in the corridor resulting in a total of 21 receptors experiencing noise levels approaching or exceeding the Montana Department of Transportation's noise abatement criteria.	
	An increase in the area of the roadway surface would lead to more runoff which could possibly be contaminated by pollutants associated with the operation of a motor vehicle. This could percolate through the alluvial materials and into the Missoula Valley Aquifer.	Direct impacts and indirect effects to water resources and water quality of the area will be minimized or avoided using Best Management Practices. Management of surface runoff may include a dry well system which may be subject to additional requirements.
Wetlands	No wetlands were defined within the project corridor.	No mitigation required.
Water Body and Wildlife		No mitigation required.
	No impacts.	No mitigation required.
Floodplains	No impacts.	No mitigation required.
Threatened or Endangered		N- mid-dim manin-1
Historic and Cultural Reso	No impacts.	No mitigation required
Thistoric and Cultural Resc	No impacts.	No mitigation required.
Hazardous Materials		
	Several sites along the project have the potential for hazardous materials concerns including asbestos, lead paint, and petroleum hydrocarbon contamination to soil and ground water.	During the design and right-of-way phases of the proposed project, possible contamination sites will be investigated for contamination. All buildings to be acquired within the project corridor will also be inspected for asbestos and lead contamination.
Visual Resources	Many of the design features in the Preliminary Preferred Alternative would improve the aesthetic quality of the corridor. Even though the road surface is wider under the Preliminary Preferred Alternative, placement of landscaping features within raised medians and landscaped boulevards would soften views from the road. The removal of existing vegetation in the corridor may be necessary including some large diameter trees.	No mitigation required.



Major Unresolved Issues

The Preliminary Preferred Alternatives are not in Missoula's current Transportation Improvement Program (2007-2011). The project is currently included in a fiscally constrained conforming Long Range Transportation Plan. In addition, at least one subsequent phase (e.g., preliminary engineering, final design, right-of-way, utility relocation, or construction) of the project has to be included in the approved Transportation Improvement Program (and it currently is not) before the Federal Highway Administration can sign the Record of Decision.

The Missoula Transportation Improvement Program identifies the transportation projects to undertake over a five-year period based on short-term transportation priorities, and is updated annually. All projects receiving federal funding must be in the Transportation Improvement Program. It is realistic in terms of available funding and is not just a "wish list" of projects. This concept is known as fiscal constraint.

Fiscal constraint is a demonstration of sufficient funds (federal, state, local, and private) to implement proposed transportation system improvements, as well as to operate and maintain the entire system, through the comparison of revenues and costs.

Missoula is currently working on the 2008 Long Range Transportation Plan, and it is scheduled for completion in the Fall of 2008. During the long range transportation planning process, the project is weighed against other projects competing for local funding to develop a fiscally-constrained plan. All projects in the process are evaluated to determine the optimum mixture that best meets the development of an integrated multimodal transportation system to facilitate the safe and efficient movement of people and goods.

If the Preferred Alternatives are included in a fiscally constrained conforming transportation plan and Transportation Improvement Program, the Federal Highway Administration can sign a Record of Decision for the Preferred Alternative. Conversely, if it is not in such plans, then the Federal Highway Administration could not sign a Record of Decision advancing a build alternative. In addition, the Federal Highway Administration can delay issue of a Record of Decision until the Long Range Transportation Plan and Transportation Improvement Program include the project or can select the No-Build Alternative.

Construction Phasing

Based on currently available funds, reconstruction of Russell and South 3rd Streets as proposed in this Environmental Impact Statement would likely be phased. Construction projects would be programmed and completed as funds become available over the next several years.

Prior to finalizing a Record of Decision, the entire project would need to be included in the fiscally constrained portion of the conforming Long Range Transportation Plan and, in addition, at least one subsequent phase (e.g., final design, right-of-way, utility relocation or construction) included in the approved Transportation Improvement Program.

The City of Missoula receives several million dollars per year that can be accumulated under the regular program, and would have to seek additional funding to cover the remaining costs beyond regular funding sources.

It should be noted that if a substantial amount of time passes and/or ground conditions change between phases of construction, a re-evaluation of existing conditions and potential impacts may be required. Areas which could be reviewed include traffic projections contained in the Environmental Impact Statement as compared to actual counts at the time of final design for the project phase, and changes in the character of the corridor from either infill development or redevelopment. If no substantial changes have occurred, the project would proceed under the approved decision document. If substantial changes have occurred, and new impacts are identified, any changes in the project would likely need to be documented through a supplement to this Environmental Impact Statement.



Funding

Through the Missoula area metropolitan transportation planning process, Russell Street has been prioritized as the number one priority for federal and state funds provided through the Surface Transportation Program-Urban funding program. Additional federal, state, and local funding prioritized through the metropolitan transportation planning process includes Congestion Mitigation and Air Quality funding, Bridge funding, Enhancement funding, and local funds. Also, a congressionally directed earmark was provided for this project through the most recent federal transportation funding bill, the Safe, Accountable, Flexible, Efficient Transportation Equity Act –A Legacy for Users. At least \$20 to 25 million is anticipated to be available from these combined funding sources.

Missoula FFY 2007-2011 Transportation Improvement Program

Project	Amount Reserved
South 3 rd Street (Reserve to Russell)	\$2,000,000* (Local funding)
Russell Street (Mount to Broadway)	\$12,119,800 (State Transportation
	Program - Urban)
Russell Street Grade Separated Crossing	\$348,500 (Congestion Mitigation
	Air Quality)
Milwaukee Trail West	\$388,200 (Surface Transportation
	Program Enhancement-City)
Russell Street	\$5,000,000 (Bridge)
Russell Street	\$4,962,000 (Earmark)

Note: * Projected amount

Permits and Coordination Required

Prior to construction of the Russell Street and South 3rd Street reconstruction project the following permits and coordination would be required:

- Section 401 Certification of the Clean Water Act Water Quality Certification from the Montana Department of Environmental Quality
- Section 404 Permit of the Clean Water Act from the U.S. Army Corps of Engineers.
- Montana Pollutant Discharge Elimination Permit from the Montana Department of Environmental Quality
- Montana Land-Use License or Easement on Navigable Water from the Montana Department of Natural Resources
- Floodplain encroachments must be approved by the Missoula County Floodplain Administrator.
- Montana Stream Preservation Act (SPA 124 coordination) with Montana Fish, Wildlife & Parks
- City of Missoula MS4 Permit
- Any necessary drywell permitting would be coordinated with the Environmental Protection Agency



TABLE OF CONTENTS

FORI	EWORD		I
1.0	Purp	OSE OF AND NEED FOR PROPOSED ACTION	1-1
100	1.1	Project Area Description.	
	1.2	Proposed Action	
	1.3	Purpose of the Proposed Action	
	1.4	Need for the Proposed Action	
	1.5	Additional Benefits of Improvements	
	1.6	Goals and Objectives	
2.0	ALTE	RNATIVES ANALYSIS	2-1
	2.1	Development of Alternatives	
	2.2	Description of the Alternatives	
		Features Common to All Alternatives	
		Russell Street Alternatives	
		South 3 rd Street Alternatives	
	2.3	Analysis of Alternatives	
	2.4	Identification of the Preliminary Preferred Alternatives	
	2.5	Specific Design Elements of the Preliminary Preferred Alternative	
	2.6	Other Alternatives Considered But Eliminated	
	2.7	Construction Phasing and Funding Strategies	2-63
3.0	AFFE	CTED ENVIRONMENT	3-1
	3.1	Land Use	
	3.2	Farmlands	
	3.3	Social Conditions	
	3.4	Economic Conditions	
	3.5	Parks and Recreation	
	3.6	Pedestrian and Bicycle Conditions	
	3.7	Air Quality	
	3.8	Noise	
	3.9	Water Quality	
	3.10	Wetlands	
	3.11	Water Bodies and Wildlife Habitat	
	3.12	Floodplains	
	3.13	Threatened and Endangered Species	
	3.14	Historic and Cultural Resources.	
	3.15	Hazardous Materials	
2	3.16	Visual Resources	

Table of Contents

4.0	ENVI	RONMENTAL CONSEQUENCES & MITIGATION	4-1
	4.1	Land Use Impacts	4-1
	4.2	Farmland Impacts	4-2
	4.3	Social Impacts	4-2
	4.4	Economic Impacts	4-13
	4.5	Parks and Recreation	4-17
	4.6	Pedestrian and Bicycle Impacts	4-19
	4.7	Air Quality Impacts	4-21
	4.8	Noise Impacts	4-23
	4.0	Water Quality Impacts	
	4.10	Wetland Impacts	
	4.11	Water Body and Wildlife Habitat Impacts	
	4.12	Floodplains	
	4.13	Threatened and Endangered Species Impacts	4-34
	4.14	Historic and Cultural Resource Impacts	4-35
	4.15	Hazardous Materials	
	4.16	Visual Resources	
	4.17	Cumulative Impacts	
	4.18	Construction Impacts	
	4.19	Energy Implications	4-54
	4.20	Relationship Between Short-Term Use and Long-Term Productivity	
	4.21	Irreversible and Irretrievable Commitment of Resources	
	4.22	Permits and Coordination Required	4-56
5.0	DRAI	TT SECTION 4(F) EVALUATION	5-1
	5.1	Proposed Action	
	5.2	Section 4(f) Properties	5-2
	5.3	Impacts on the Section 4(f) Properties	5-7
	5.4	Avoidance Alternatives	
	5.5	Measures to Minimize Harm	5-12
	5.6	Coordination	5-12
6.0	LIST	OF PREPARERS AND REVIEWERS	6-1
7.0	COMMENTS AND COORDINATION		
	7.1	Advisory Committees	7-1
	7.2	Public Meetings	7-3
	7.3	Agency Coordination	
	7.4	Summary of Public Comments	
	7.5	Other Public Involvement and Information Techniques	
8.0	DIST	RIBUTION LIST	8-1



LIST OF FIG	URES	
F-1	Major Arterial Network	1-3
1.1		1.0
1-1	Project Location Map	
1-2	Existing Transportation Facility Conditions	1-3
1-3	Existing and Projected Traffic Volumes on Russell Street and South 3 rd Street	1-5
1-4	Mainline Level of Service Definitions	
1-5	Intersection Level of Service Definitions	
1-6	Russell Street Level of Service	
1-7	South 3 rd Street Level of Service	
1-8	City of Missoula Bike Lane/Route Map	
1-9	Mountain Line Bus Routes in Project Area	1-13
2-1	Typical Roundabout Features	2-3
2-2	Baseline Modifications to Russell Street	2-7
2-3	Proposed River Road Connection	2-8
2-4	Alternative 1 – General Elements	2-11
2-5	Alternative 2 – General Elements	2-13
2-6	Alternative 3 – General Elements	2-15
2-7	Alternative 4 – General Elements	2-17
2-8	Alternative 5 – General Elements	2-19
2-9	Alternative A – General Elements	2-21
2-10	Alternative B – General Elements	2-23
2-11	Alternative C – General Elements	2-25
2-12	Alternative D – General Elements	2-27
2-13	Alternative E – General Elements	2-29
2-14	Hourglass Effect	2-32
2-15	Typical Lane Utilization Imbalance	2-33
2-16	Alternative 5 – Refined	2-42
2-17	Preliminary Preferred Alternative – General Elements	2-48
2-18	Russell Street Preliminary Preferred Alternative	2-49
2-19	Alternative C – General Elements	2-56
2-20	South 3 rd Street Preliminary Preferred Alternative	2-57
3-1	Land Use	3-3
3-2	Neighborhoods within Project Corridor	
3-3	Community and Public Facilities, and Parks and Recreation Areas	3-9
3-4	Existing Pedestrian and Bike Facilites	3-12
3-5	Russell Street Noise Receptor Locations	
3-6	South 3 rd Street Noise Receptor Locations	
3-7	Irrigation Ditches Intersecting Study Area	
3-8	Clark Fork River 100-Year Floodplain.	
3-9	Sites Eligible for Listing on the National Register of Historic Places (Russell St.)	
3-10	Sites Eligible for Listing on the National Register of Historic Places (South 3 rd St.)	
3-11	Underground Storage Tank Sites	

Table of Contents

		Neighborhood Connectivity within Project Corridor	
	4-2	Right-of-Way Acquisitions on Russell Street	4-7
	4-3	Right-of-Way Acquisitions on South 3 rd Street	
	4-4	Bitterroot Branch Trail Under-crossing	
	4-5	Milwaukee Corridor Trail Under-crossing	
	4-6	Grade Separated Cross-Section.	
	4-7	Shady Grove Trail Connections	
	4-8	Proposed Russell Street Bridge Design	
	4 - 9	Impacts to Historic Resources.	
	4-10	Locations of Potential Hazardous Materials Impacts	
		r r	
	5-1	Section 4(f) Property Impacts	
	5-2	De Minimis Impacts on Site 24MO800	5-5
	5-3	De Minimis Impacts to Trail Crossings	5-6
	5-4	Impacts on 824 Russell Street (24MO811)	5-7
	5-5	Impacts on 941 Kern Street (24MO819)	5-8
	5-6	Avoidance Alternative Constraints	5-10
List	OF TABL	LES	
	1.1	Accident Types on Russell Street	1-14
	1.2	Accident Types on South 3 rd Street	1-14
	2.1	Russell Street Alternatives – Overview of Major Features	2-9
	2.2	South 3 rd Street Alternatives – Overview of Major Features	2-20
	2.3	Safety and Capacity Evaluation Matrix	2-30
	2.4	Intersection Level of Service	2-34
	2.5	Parameters for General Urban Thoroughfares	2-35
	2.6	Summary of Impacts on Russell Street.	
	2.7	Summary of Impacts on South 3 rd Street	
	2.8	Preliminary Estimated Costs of the Build Alternatives	2-38
	2.9	Screening Summary	
	2.10	Impact Comparison of the Forwarded Alternatives on Russell Street	
	2.11	Missoula FFY 2007-2011 Transportation Improvement Program	
	3.1	Missoula City and County Population Growth, 1980 to 2000	3-5
	3.2	Racial Composition	3-6
	3.3	Estimated Percentage of Population Below the Poverty Level	
	3.4	Receptors and Predicted Noise Levels (Russell Street)	
	3.5	Receptors and Predicted Noise Levels (South 3 rd Street)	3-22
	3.6	Sites Eligible or Listed on the National Register of Historic Places	
	4.1	Summary Comparison of Impacts to Residences and Community Facilities	
		Detailed Right-of-Way Impacts on Residential Properties	1 (
	4.2		
	4.2 4.3	Summary Comparison of Impacts to Businesses and Commercial Properties Right-of-Way Impacts on Commercial Properties	4-14



4.5	Bicycle Compatibility Index	4-20
4.6	Russell Street Receptors and Predicted Noise Levels	
4.7	South 3 rd Street Receptors and Predicted Noise Levels	4-25
4.8	Historic Properties Avoided by All Build Alternatives	
4.9	Historic Resource Impacts	
4.10	Summary of Potential Hazardous Materials Impacts	
4.11	Visual Benefits of Build Alternatives	
5.1	Impacted Properties Protected by Section 4(f)	5-4
7.1	Advisory Committee Members	7-1
7.2	Summary of Public Meetings	

APPENDICES

- A. Roundabouts: An Informational Guide
- B. Technical Memorandum
- C. State Historic Preservation Office Coordination
- D. Public and Agency Comment Summary and Correspondence
- E. De Minimis Coordination

Table of Contents

PAGE INTENTIONALLY LEFT BLANK



FOREWORD

Population trends in the greater Missoula area have shown a steady increase with a projection for continued growth. In Missoula County, population growth averaged less than 0.5 percent a year during the decade from 1980 to 1990 but reached nearly 2.0 percent per year between 1990 and 2000. The 2000 population of the County was close to 96,000, with just over 57,000 of those individuals residing within the City of Missoula. Growth outside of the County but still within the greater Missoula commuting area also continues to increase. According to a U.S. Census Bureau forecast in 2001, the population of Missoula County is expected to exceed 114,000 by the year 2015. This level of growth has led City and County officials to focus a great deal of attention on the maintenance and upgrade of much of the area's outdated and insufficient infrastructure.

In response to the roadway infrastructure needs and consistent with priorities established through the Missoula area metropolitan transportation planning process, the City of Missoula, in cooperation with the Federal Highway Administration and the Montana Department of Transportation, proposes to improve portions of Russell Street and South 3rd Street in Missoula, Montana. The project is intended to address current and projected capacity issues. The proposed Russell Street and South 3rd Street improvements are consistent with recommendations contained in the *Missoula Urban Comprehensive Plan–1998 Update*, the *1996, 1999, and 2004 Missoula Transportation Plan Updates*, and the *Missoula Non-Motorized Transportation Plan* (2002).

History and Background

Long Range Planning Process

The Missoula Office of Planning and Grants coordinated the Missoula Transportation Plan updates of 1996, 1999, and 2004 with input from the public, the Transportation Policy Coordinating Committee, and the Transportation Technical Advisory Committee. These committees consist of representatives from the City of Missoula, Missoula County, MDT, FHWA, the Missoula Urban Transportation District, the Missoula Ravalli Transportation Management Association, and other community organizations. An ad hoc Citizens Transportation Advisory Group and the public at-large also provided input into the Missoula transportation planning process. The Missoula Transportation Plan, along with the *Missoula Urban Comprehensive Plan–1998 Update*, provides the guiding principles for planning and development within the City.

As part of the metropolitan transportation planning process, a road system needs assessment was completed within the Missoula transportation planning process that included an analysis of the Russell Street corridor and the South 3rd Street corridor. The 2004 Missoula Transportation Plan Update forwarded recommendations from previous Plan Updates to widening Russell Street to five lanes and South 3rd Street to three lanes to correct roadway deficiencies. The analysis of South 3rd Street in the Plan identified the intersections of South 3rd Street with Reserve Street and with Russell Street as high crash locations and capacity-related modifications were

Foreword

recommended for South 3rd Street to meet future traffic demands. Modifications to both Russell Street and South 3rd Street were recommended as Major Network Improvement Projects in the Plan.

The 2004 Transportation Plan identified the intersections of Russell Street with West Broadway Street, Wyoming Street, South 2nd Street, South 3rd Street, and Mount Avenue as locations with at least 12 crashes per year. The intersections of Russell Street with South 5th Street, and South 3rd Street with Reserve Street were identified as locations with crashes higher than expected for an urban route with these traffic volumes. In addition, the congestion levels for many intersections within the project area were determined to be higher than the desired level for a major arterial. An analysis of the projected traffic volumes indicated that the portion of Russell Street between the Mount Avenue/South 14th Street and West Broadway Street intersections would require modifications to meet future capacity-related travel demands. This is discussed in more detail in Section 1.4 of this chapter.

Addition of Proposed South 3rd Street Project

The South 3rd Street project began as a separate project in 1999. An Environmental Assessment was initiated under a National Environmental Policy Act process to study alternative modifications to South 3rd Street to increase capacity, correct roadway deficiencies, and improve safety. The Russell Street project was scheduled to begin the analysis phase in 2000. Because of the interconnected relationship of the two corridors, the City of Missoula, Montana Department of Transportation, and Federal Highway Administration decided to combine the two projects into one analysis and Environmental Impact Statement. Two members of the Advisory Committee from the original South 3rd Street project joined the Advisory Committee for the Russell Street and South 3rd Street project, which provided continuity between the two projects. The work that had previously been completed for South 3rd Street was incorporated into the early phases of the environmental review process.

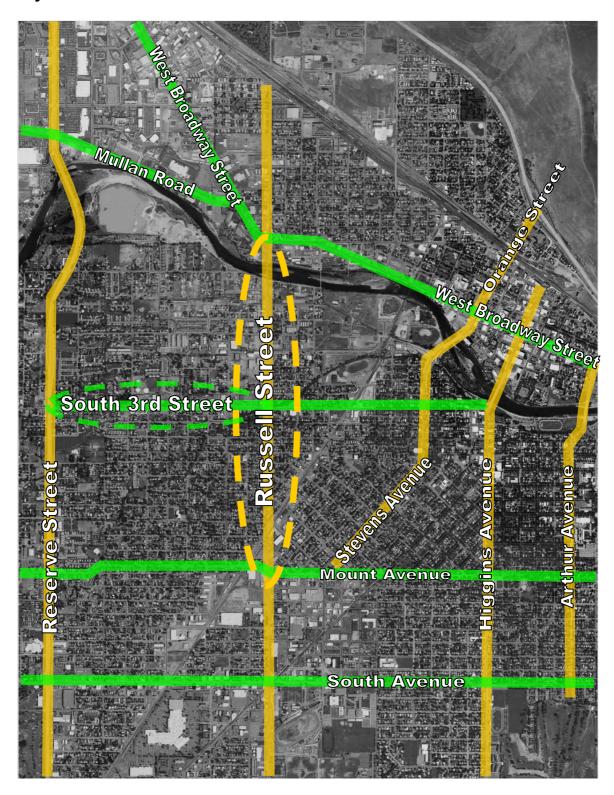
Logical Termini

Missoula's roadway system consists of a network of major roads (arterials) that serve longer trips through the urban area and collectors and local streets that provide connections to and between arterials and direct land access. As depicted in Figure F-1, Reserve Street, Russell Street, Stevens/Orange Street, Higgins Avenue, and Arthur Avenue are the key north-south arterials in the city. South Avenue, Mount Avenue, South 3rd Street, and West Broadway Street comprise the key east-west arterials, and complete the major arterial network for the City of Missoula.

As a part of the roadway grid system, Russell Street is particularly important as a major arterial due to its location and orientation. Russell Street lies 11 blocks east of Reserve Street, the most westerly arterial, and 14 blocks west of the next continuous north-south arterial, Higgins Avenue. Russell Street provides a critical north-south link in this part of the community, and provides one of only five river crossings for vehicular traffic in the city. South 3rd Street plays a similar role in an east-west fashion as one of only four major east-west arterials in the grid system.



Figure F-1 Major Arterial Network



Foreword

The lengths of these two corridors are dictated by their logical connections to other major links in this overall city street network. The proposed project on Russell Street would connect with an existing four-lane segment of Russell Street south of Mount Avenue/South 14th Street. Thus a continuous four-lane arterial would be provided for the extent of Russell Street up to its intersection with West Broadway Street.

The proposed improvements on South 3rd Street would connect between two major north-south arterials, Reserve Street and Russell Street.

These two projects thus have logical termini and have independent utility in the sense that each project could be constructed independent of the other without impacting the function or usefulness of the other corridor.